

AMENDMENTS TO THE CLAIMS:

1-14. (Canceled)

15. (Currently Amended) A light-emitting device using gallium nitride compound semiconductor according to claim 1, further comprising:

an emission layer with a multi quantum-well (MQW) structure, in which a barrier layer and a well layer are formed alternatively;

a substrate; and

a buffer layer formed on said substrate, wherein said barrier layer is made of $\text{Al}_{1-x}\text{Ga}_x\text{N}$.

16. (Original) A light-emitting device using gallium nitride compound semiconductor according to claim 15, wherein said buffer layer is formed at a temperature of 1000°C to 1180°C.

17. (Original) A light-emitting device using gallium nitride compound semiconductor according to claim 15, wherein said buffer layer has a thickness of 0.01 μm to 3.2 μm .

18. (Currently Amended) A light-emitting device using gallium nitride compound semiconductor according to claim 15, wherein said buffer layer is formed by physical vapor deposit such as including any of sputtering, ion plating, and laser-ablation, ECR, etc. ablation.

19. (Original) A light-emitting device using gallium nitride compound semiconductor according to claim 18, wherein said buffer layer has a thickness of 100 Å to 3000 Å.

20. (Original) A light-emitting device using gallium nitride compound semiconductor according to claim 18, wherein said buffer layer is formed at a temperature of 200°C to 600°C.

21. (Currently Amended) A light-emitting device using gallium nitride compound semiconductor according to claim 18, wherein said buffer layer is treated by heat treatment at a temperature of 1000°C to 1250°C.

22. (Original) A light-emitting device using gallium nitride compound semiconductor according to claim 21, wherein said heat treatment is carried out in an atmosphere of H₂ and NH₃ gases.